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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/524,283

02/10/2005

Charles Perkins

03-20 US

6390

23693

7590

02/28/2007

Varian Inc.

Legal Department

3120 Hansen Way D-102

Palo Alto, CA 94304

EXAMINER

CHRISTENSEN, RYAN S

ART UNIT

PAPER NUMBER

2856

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/28/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/524,283

Applicant(s)

PERKINS ET AL.

Examiner

Ryan Christensen

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1-21-2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. In order to clarify the previous office action, amended claims 1 and 9 were considered with all the limitations added by the preliminary amendment. Original claim 7 was addressed, where it had in fact been cancelled by the preliminary amendment. This resulted in the limitations of amended claims 7-18 being addressed as claims 8-19.
2. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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5. Claims rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,786,529 (Voss et al.) in view of U.S. Patent 5,325,708 (De Simon).
6. With respect to claims 1 and 9, Voss et al. disclose providing a sealable chamber (test chamber, Col. 3, lines 29-30) configured to receive a test piece, a trace gas permeable member mounted in gas communication with the chamber (2, Fig. 4), a trace gas sensor comprising a absorption pump (3, Fig. 4) and a mass spectrometer (4, Fig. 4), in gas communication with the permeable member (Fig. 4) and configured to sense a trace gas that passes from the chamber through the permeable member (Col. 3, lines 29-35), the sealable chamber being isolated, during leak detection by the mass spectrometer, from gas communication with a vacuum pumping device (conventional vacuum pump (disconnected after evacuation of chamber 5), Col. 4. lines 37-40). Further a trace gas is passed through the permeable member and sensed with a trace gas sensor (Col. 3, lines 36-46).
7. Voss et al. do not explicitly disclose an ion pump as the means for detecting the trace gas. De Simon discloses the use of an ionization pump in place of the mass spectrometer and absorption pump in order to detect the Helium concentration in a leak detection system (1, Fig. 4). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system disclosed by Voss et al. by providing an ion pump in place of the mass spectrometer because these are equivalents known in the art for the detection of

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trace gasses such as Helium and the courts have found the use of an equivalent known for the same purpose not to be inventive. See MPEP 2144.06

8. With respect to claims 2 and 10, Voss et al. disclose a quartz member (Col. 4, lines 20-25).
9. With respect to claims 3, and 11 Voss et al. disclose a quartz member (16, and Col. 4, lines 20-25) and a heating element in contact with the quartz member (17) and the conditions (ie elevating a temperature for 20 minutes) imply a controller for controlling all the heaters.
10. With respect to claims 4 and 12, Voss et al. disclose that FEP is known in the art as the permeable member (Col. 2, lines 14-26).
11. With respect to claims 5 and 14, 15, the trace gas permeability is controllable (Col. 4, lines 20-29).
12. With respect to claims 6, 13 and 17, the permeable member is permeable to Helium, which is the trace gas (Col. 4, lines 20-29).
13. With respect to claim 8, Fig. 4 illustrates a housing enclosing the permeable member, Figure 4 also illustrates a flange extending away from the permeable member.
14. With respect to claims 17 and 18, Voss et al. discloses that the measurements are not taken until after a specified time (ie the appropriate vacuum is achieved, and in certain embodiments the getter material is properly heater (20 minutes) Col. 4, lines 37-58).

15. With respect to claims 15 and 16, Voss et al. further disclose the quartz membrane being heated, which changes the sensitivity of the device by allowing the trace gas to pass (Col. 4, lines 20-29).

Conclusion


16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
17. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.
18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Christensen whose telephone number is

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571-272-2683. The examiner can normally be reached on Monday - Friday, 8am - 5pm.

19. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on 571-272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
20. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RC


HEZRON WILLIAMS
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